

**A MONOCLONAL ANTIBODY AGAINST ESTROGEN STIMULATED
LEUCINE AMINOPEPTIDASE**

ABSTRACT

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The identification and characterization of risk factors and their molecular implications in the pathophysiology of human diseases such as cancer is essential for designing efficient diagnostic assays and therapeutic compounds. Estrogenic steroids, under normal physiological conditions, have been shown to play a critical function in several tissues. The response of such a variety of tissues to estrogen stimulation can explain in part its active role in the development and progression of different human diseases, particularly Breast Cancer. Searching for estrogen-responding cellular factors in parental cells of primary human breast carcinomas obtained from tumour biopsies an isoenzyme of putative Leucine Aminopeptidase (LAPase; EC 3.4.11.1) was identified. Results have demonstrated that this marker is found to be elevated in the sera of women with invasive ductal and metastatic carcinomas. A monoclonal antibody against this cellular marker have been produced. This invention refers to the use of LAPase monoclonal antibodies for first line confirmatory blood-based testing for Breast Cancer.